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RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/380,738_

Source: _1653_

Date Processed by STIC: _4-17-01_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or;**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW.

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

Sequence Listing Error Summary

SERIAL NUMBER: _09/380,738_

<u>ERROR DETECTED   SUGGESTED   CORRECTION</u>

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics
The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

2 _____ Wrapped Aminos
The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 _____ Incorrect Line Length
The rules require that a line not exceed 72 characters in length. This includes spaces.

4 _____ Misaligned Amino Acid
Numbering
The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 _____ Non-ASCII
This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 _____ Variable Length
Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.

7 _____ PatentIn ver. 2.0 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

8 _____ Skipped Sequences
(OLD RULES)
Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 _____ Skipped Sequences
(NEW RULES)
Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 _____ Use of n's or Xaa's
(NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 ✓ Use of "Artificial"
(NEW RULES)
Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
<u>Valid response is Artificial Sequence.</u>

12 _____ Use of <220>Feature
(NEW RULES)
Sequence(s) _____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of new Rules)

13 _____ PatentIn ver. 2.0 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

AMC - Biotechnology Systems Branch - 4/06/2001

1653

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/380,738

DATE: 04/17/2001
TIME: 13:02:31

Input Set : A:\Reynolds.txt
Output Set: N:\CRF3\04172001\I380738.raw

```
 3 <110> APPLICANT: REYNOLDS, Eric
 5 <120> TITLE OF INVENTION: CALCIUM PHOSPHOPEPTIDE COMPLEXES
 7 <130> FILE REFERENCE: 040268/0161
 9 <140> CURRENT APPLICATION NUMBER: US 09/380,738
10 <141> CURRENT FILING DATE: 1999-12-06
12 <150> PRIOR APPLICATION NUMBER: PCT/AU98/00160
13 <151> PRIOR FILING DATE: 1998-03-13
15 <150> PRIOR APPLICATION NUMBER: AU PO5662
16 <151> PRIOR FILING DATE: 1998-03-13
18 <160> NUMBER OF SEQ ID NOS: 23
20 <170> SOFTWARE: PatentIn version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 21
24 <212> TYPE: PRT
25 <213> ORGANISM: Bos sp.
27 <220> FEATURE:
28 <221> NAME/KEY: misc_feature
29 <222> LOCATION: (6)..(6)
30 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
33 <220> FEATURE:
34 <221> NAME/KEY: misc_feature
35 <222> LOCATION: (8)..(8)
36 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
39 <220> FEATURE:
40 <221> NAME/KEY: misc_feature
41 <222> LOCATION: (9)..(9)
42 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
45 <220> FEATURE:
46 <221> NAME/KEY: misc_feature
47 <222> LOCATION: (10)..(10)
48 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
51 <220> FEATURE:
52 <221> NAME/KEY: misc_feature
53 <222> LOCATION: (17)..(17)
54 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
57 <400> SEQUENCE: 1
W--> 59 Gln Met Glu Ala Glu Xaa Ile Xaa Xaa Xaa Glu Glu Ile Val Pro Asn
60 1               5                   10                  15
W--> 62 Xaa Val Glu Gln Lys
63              20
65 <210> SEQ ID NO: 2
66 <211> LENGTH: 25
67 <212> TYPE: PRT
68 <213> ORGANISM: Bos sp.
70 <220> FEATURE:
71 <221> NAME/KEY: misc_feature
72 <222> LOCATION: (15)..(15)
```

Left page (partially obscured):

RAW SEQUENCE LI[STING]
PATENT APPLICAT[ION:

Input Set : A:\
Output Set: N:\

```
146 <222> LOCATION: (8)..(8)
147 <223> OTHER INFORMATION: Xa[a
150 <220> FEATURE:
151 <221> NAME/KEY: misc_featur[e
152 <222> LOCATION: (9)..(9)
153 <223> OTHER INFORMATION: Xa[a
156 <220> FEATURE:
157 <221> NAME/KEY: misc_featur[e
158 <222> LOCATION: (10)..(10)
159 <223> OTHER INFORMATION: Xa[a
162 <220> FEATURE:
163 <221> NAME/KEY: misc_featur[e
164 <222> LOCATION: (16)..(16)
165 <223> OTHER INFORMATION: Xa[a
168 <400> SEQUENCE: 4
```
W--> 170 Lys Asn Thr Met Glu His Val
```
171 1                         5
173 Gln Glu Thr Tyr Lys
174                   20
176 <210> SEQ ID NO: 5
177 <211> LENGTH: 5
178 <212> TYPE: PRT
```
C--> 179 <213> ORGANISM: (Artificial/
```
181 <220> FEATURE:
182 <221> NAME/KEY: misc_featur[e
183 <222> LOCATION: ()..()
184 <223> OTHER INFORMATION: Sy[
187 <220> FEATURE:
188 <221> NAME/KEY: misc_featur[e
189 <222> LOCATION: (1)..(1)
190 <223> OTHER INFORMATION: Xa[
193 <220> FEATURE:
194 <221> NAME/KEY: misc_featur[e
195 <222> LOCATION: (2)..(2)
196 <223> OTHER INFORMATION: Xa[
199 <220> FEATURE:
200 <221> NAME/KEY: misc_featur[e
201 <222> LOCATION: (3)..(3)
202 <223> OTHER INFORMATION: Xa[
205 <400> SEQUENCE: 5
```
W--> 207 Xaa Xaa Xaa Glu Glu
```
208 1                 5
210 <210> SEQ ID NO: 6
211 <211> LENGTH: 8
212 <212> TYPE: PRT
```
C--> 213 <213> ORGANISM: (Artificial/[
```
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: ()..()
```

file://C:\CRF3\Outhold\VsrI380738.htm

Right page:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/380,738
DATE: 04/17/2001
TIME: 13:02:31

Input Set : A:\Reynolds.txt
Output Set: N:\CRF3\04172001\I380738.raw

```
73 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
76 <220> FEATURE:
77 <221> NAME/KEY: misc_feature
78 <222> LOCATION: (17)..(17)
79 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
82 <220> FEATURE:
83 <221> NAME/KEY: misc_feature
84 <222> LOCATION: (18)..(18)
85 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
88 <220> FEATURE:
89 <221> NAME/KEY: misc_feature
90 <222> LOCATION: (19)..(19)
91 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
94 <400> SEQUENCE: 2
```
W--> 96 Arg Glu Leu Glu Glu Leu Asn Val Pro Gly Glu Ile Val Glu Xaa Leu
```
97 1              5                    10                   15
```
W--> 99 Xaa Xaa Xaa Glu Glu Ser Ile Thr Arg
```
100              20                   25
102 <210> SEQ ID NO: 3
103 <211> LENGTH: 25
104 <212> TYPE: PRT
105 <213> ORGANISM: Bos sp.
107 <220> FEATURE:
108 <221> NAME/KEY: misc_feature
109 <222> LOCATION: (11)..(11)
110 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
113 <220> FEATURE:
114 <221> NAME/KEY: misc_feature
115 <222> LOCATION: (12)..(12)
116 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: (13)..(13)
122 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
125 <220> FEATURE:
126 <221> NAME/KEY: misc_feature
127 <222> LOCATION: (16)..(16)
128 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
131 <400> SEQUENCE: 3
```
W--> 133 Asn Ala Asn Glu Glu Glu Tyr Ser Ile Gly Xaa Xaa Xaa Glu Glu Xaa
```
134 1              5                    10                   15
136 Ala Glu Val Ala Thr Glu Glu Val Lys
137              20                   25
139 <210> SEQ ID NO: 4
140 <211> LENGTH: 21
141 <212> TYPE: PRT
142 <213> ORGANISM: Bos sp.
144 <220> FEATURE:
145 <221> NAME/KEY: misc_feature
```

file://C:\CRF3\Outhold\VsrI380738.htm

4/17/01

```
218 <223> OTHER INFORMATION: Synthetic peptide
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (2)..(2)
224 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
227 <220> FEATURE:
228 <221> NAME/KEY: misc_feature
229 <222> LOCATION: (4)..(4)
230 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
233 <220> FEATURE:
234 <221> NAME/KEY: misc_feature
235 <222> LOCATION: (5)..(5)
236 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
239 <220> FEATURE:
240 <221> NAME/KEY: misc_feature
241 <222> LOCATION: (6)..(6)
242 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
245 <400> SEQUENCE: 6
```

W--> 247 Glu Xaa Ile Xaa Xaa Xaa Glu Glu
```
    248 1                   5
    250 <210> SEQ ID NO: 7
    251 <211> LENGTH: 5
    252 <212> TYPE: PRT
```
C--> 253 <213> ORGANISM: (Artificial/Unknown)
```
    255 <220> FEATURE:
    256 <221> NAME/KEY: misc_feature
    257 <222> LOCATION: ()..()
    258 <223> OTHER INFORMATION: Synthetic peptide
    261 <400> SEQUENCE: 7
    263 Gln Met Glu Ala Glu
    264 1                   5
    266 <210> SEQ ID NO: 8
    267 <211> LENGTH: 8
    268 <212> TYPE: PRT
```
C--> 269 <213> ORGANISM: (Artificial/Unknown)
```
    271 <220> FEATURE:
    272 <221> NAME/KEY: misc_feature
    273 <222> LOCATION: ()..()
    274 <223> OTHER INFORMATION: Synthetic peptide
    277 <220> FEATURE:
    278 <221> NAME/KEY: misc_feature
    279 <222> LOCATION: (5)..(5)
    280 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
    283 <400> SEQUENCE: 8
```
W--> 285 Ile Val Pro Asn Xaa Val Glu Gln
```
    286 1                   5
    288 <210> SEQ ID NO: 9
    289 <211> LENGTH: 5
    290 <212> TYPE: PRT
```

Refer to p. 3

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/380,738

DATE: 04/17/2001
TIME: 13:02:31

Input Set : A:\Reynolds.txt
Output Set: N:\CRF3\04172001\I380738.raw

```
C--> 291 <213> ORGANISM: (Artificial/Unknown)
     293 <220> FEATURE:
     294 <221> NAME/KEY: misc_feature
     295 <222> LOCATION: ()..()
     296 <223> OTHER INFORMATION: Synthetic peptide
     299 <220> FEATURE:
     300 <221> NAME/KEY: misc_feature
     301 <222> LOCATION: (2)..(2)
     302 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
     305 <220> FEATURE:
     306 <221> NAME/KEY: misc_feature
     307 <222> LOCATION: (3)..(3)
     308 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
     311 <400> SEQUENCE: 9
W--> 313 Ser Xaa Xaa Glu Glu
     314 1                 5
     316 <210> SEQ ID NO: 10
     317 <211> LENGTH: 5
     318 <212> TYPE: PRT
C--> 319 <213> ORGANISM: (Artificial/Unknown)
     321 <220> FEATURE:
     322 <221> NAME/KEY: misc_feature
     323 <222> LOCATION: ()..()
     324 <223> OTHER INFORMATION: Synthetic peptide
     327 <220> FEATURE:
     328 <221> NAME/KEY: misc_feature
     329 <222> LOCATION: (2)..(2)
     330 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
     333 <220> FEATURE:
     334 <221> NAME/KEY: misc_feature
     335 <222> LOCATION: (3)..(3)
     336 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
     339 <400> SEQUENCE: 10
W--> 341 Glu Xaa Xaa Glu Glu
     342 1                 5
     344 <210> SEQ ID NO: 11
     345 <211> LENGTH: 5
     346 <212> TYPE: PRT
C--> 347 <213> ORGANISM: (Artificial/Unknown)
     349 <220> FEATURE:
     350 <221> NAME/KEY: misc_feature
     351 <222> LOCATION: ()..()
     352 <223> OTHER INFORMATION: Synthetic peptide
     355 <220> FEATURE:
     356 <221> NAME/KEY: misc_feature
     357 <222> LOCATION: (2)..(2)
     358 <223> OTHER INFORMATION: Xaa is a phosphorylated Serine
     361 <220> FEATURE:
     362 <221> NAME/KEY: misc_feature
```

Refer to p 3

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220> to
<223> fields of each sequence which presents at least one n or Xaa.

F.Y.I.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/380,738

DATE: 04/17/2001
TIME: 13:02:32

Input Set : **A:\Reynolds.txt**
Output Set: **N:\CRF3\04172001\I380738.raw**

L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:179 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:213 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:253 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:269 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:285 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:291 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:319 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:347 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:375 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:403 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:409 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:437 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:459 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:481 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
L:497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:503 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:525 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:531 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
L:559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:565 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19
L:599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:605 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20
L:639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:645 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21
L:667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:673 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22
L:695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:701 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23
L:723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23

Creation date: 09-25-2003
Indexing Officer: GMINIE - GELLA MINIE
Team: OIPEBackFileIndexing
Dossier: 09380738

Legal Date: 08-16-2000

No.	Doccode	Number of pages
		1
1	A...	1
2	REM	

Total number of pages: 2

Remarks:

Order of re-scan issued on ....